

Subject: Physical Education (Sports Science) **Year** 10 **Ability** Mixed

Term / Date(s)	Term 1 Half Term 1	Term 1 Half Term 2	Term 2 Half Term 3	Term 2 Half Term 4
Topic	Theory R181: TA1- Components of fitness applied in sport	Theory R181: TA1 – Applying the principles of training: fitness and how it affects skill performance	Theory R181: TA2- Principles of training	Theory R181: TA3- Organising and planning a fitness training programme TA4- Evaluate own performance in the planning and delivery of a fitness training programme
Topic overview	Students will learn the definition and suitable fitness tests used, to measure each component of fitness. Students will learn the fitness component requirements of a range of sports and justify which components are more effective in competitive situations during two sports.	Students will learn the relevant fitness tests for each component of fitness. Students will conduct fitness tests, record and interpret results. Students will learn how to check tests are valid, reliable and compare their results against normative data.	Students will learn the definition and application of all principles of training. Students will learn how to set SMART targets. Students will learn the methods of training and their benefits. Students will learn the key characteristics of aerobic and anaerobic exercise.	Students will learn what needs to be considered when designing a training programme. Students will learn the key elements to a training programme. Students will learn how monitor their own progress when carrying out a training programme. Students will learn how to evaluate the effectiveness of a training programme.
Components	Students will learn: - Cardiovascular endurance/ stamina - Muscular endurance - Speed - Strength - Power - Agility - Balance - Flexibility - Coordination - Reaction time These definitions are taught so students have clear understanding on each component. This then allows them to justify how they are used in different sports and understand which tests are appropriate to measure their effectiveness. Students will learn how athletes are effective in two sports due to their fitness demands, skill drills practiced and positions they may play in. This detailed understanding of two different sports will enable students to have sound knowledge when designing a training program later on in R181 and applying their knowledge in to a sporting context in the R180 and R183. They will also learn how to select and justify their decisions with components chosen for	Students will learn: - Which tests assess fitness (and the protocols and guidelines required) - The tests for each of the 10 components of fitness - How to interpret the results (against normative data, and the reliability & validity of the results) This knowledge will develop students understanding of how to analyse their fitness strengths and weaknesses. This knowledge will allow them to effectively create the correct aims and goals when designing their fitness programme, and give them a firm understanding of how reliability and validity affect data – which provides useful cross-curricular links to Maths and Science.	Students will learn: - The four components of the SPOR principle This will allow students to understand the principle rules of effective training and how this can be applied to design an effective training programme. - The components of the FITT principle This will allow students to demonstrate how progression is applied through a variety of ways to make training safe and effective. - The five components of a SMART target This knowledge will give students a more effective way of designing measurable and achievable targets allowing progress to be made.	Students will learn: - How to design a training programme gathering specific information on the individual, their goals, their aims, the duration of the programme, suitability of activities and the progression made - evaluate the effectiveness of the training programme and areas for improvement Students will evaluate their programme, considering and suggesting areas for improvement. The evaluation skills needed to complete this unit are transferable to future units, including the exam unit, which asks students to use evaluations skills to access higher mark questions.

	two different sports. This will allow them to develop their answers and think deeper about the physical and skill level demands of contrasting sports.			
What pupils should already know (prior learning components)	Students should know: The different components of fitness and some of their definitions through the Yr7 and Yr8 fitness blocks of work within core PE.	Students should know: The different fitness tests for each component of fitness as these are carried out in the Yr7 fitness block of work.	Students should know: The methods of training from their year 8 fitness block of work. They then revisit this content in their year 9 block of fitness work and when designing a training programme in the year 10 core PE fitness block of work. The principles of training in their year 9 block of fitness work. They then apply these principles in their year 10 fitness block of work when designing a training programme.	Students should know: Students will have learnt the key knowledge throughout core PE in the year 7, year 8, year 9 and year 10 fitness block of work. They will have also had an opportunity in assessment task three to apply principles and methods of training to a specific sporting athletes programme. This will give them a deeper understanding of the knowledge needed when designing a training programme. Students will also have used key evaluation skills including SMART targets in dance, gymnastics and trampolining throughout KS3 core PE, helping them self and peer reflect.
Transferrable knowledge (skills)	Fitness components are learnt practically in core PE (fitness unit in all year groups). These components of fitness are referenced throughout all three units of the Sports Science course (R181, R180 & R183) allowing students to achieve higher marks in some assessments.	Understanding fitness tests and components will allow students understand their strengths and areas for development. This will then help them to self-reflect on their own performances within core PE and influence their planning of their training programme in the Yr10 fitness block of work.	Knowledge learnt around SMART targets helps students to more effective when setting their own personal goals within other subjects and in life. The knowledge learnt around the negative impact some SPOR principles can have on the body, enables students to understand how they may become injured. This gives them a better context when learning how specific sports injuries occur in their exam unit (R180).	The goal setting and evaluation skills developed in this unit will benefit students when setting themselves targets and evaluating their work in other subjects.
Key vocabulary pupil will know and learn	Cardiovascular endurance/ stamina, Muscular endurance, Speed, Strength, Power, Agility, Balance, Flexibility, Coordination, Reaction time	Multistage fitness test, 30sec sit up test, one minute press up test, handgrip dynamometer, Vertical jump, Illinois agility test, Standing stork stand, Sit and reach test, Anderson wall toss test, Ruler drop reaction test.	Principles, Specificity, Progression, Overload, Reversibility, Frequency, Intensity, Time, Type Methods, Continuous, Fartlek, Interval, Circuit, Plyometrics, Weight/ resistance, HIIT Characteristics, Intensity, Duration, Aerobic, Anaerobic	Training programme, goals, realistic, duration, training, suitability, organisation, adaptability, progression, measurable, evaluation, improvement, results, risk assessments
Assessment	This information section of the course is allowing students to build key knowledge in preparation for assessment task 1 (12 marks). Students learning will be checked through formative assessment during lessons.	Task 1: coursework- 12 marks Their task is to gain an understanding of their current level of fitness in both of their selected sporting activities, which must be selected from the approved activity list. They will need to consider which tests can be used to assess their fitness in each activity, and then interpret the results taking into account appropriate guidelines and protocols. They must: Research and select the tests that are appropriate for each of their selected activities Undertake the selected fitness tests and interpret their results data Task 2 : coursework- 18 marks Student must create a written report or presentation to demonstrate which skills within their two selected activities are appropriate to each component of fitness. They must: Research which components of fitness are relevant to skills in both activities.	Task 3: coursework- 24 marks Their task is to gather information on the SPOR and FITT principles, different methods of training and the use of SMART goal setting and create a presentation that must include the differences between aerobic and anaerobic exercise, using examples of each. This will be in response to specific athlete scenario. They must: Discuss how the principles of training (SPOR and FITT) and SMART goals can be applied to the athletes training programme Describe the benefits and drawbacks of each training method Describe the differences between aerobic and anaerobic exercise	Task 3: coursework- 14 marks Their task is to produce a six-week fitness training programme to improve their performance for one selected sporting activity. They must: Plan and develop a six-week fitness training programme for your selected activity, which takes into account the aims of the programme, appropriate equipment, the organisation of the programme and takes into account appropriate principles of training They should include relevant warm up and cool down routines that can be used before and after each session, this does not have to change from session to session Complete an effective risk assessment that takes into account the safety considerations. Task 4: coursework- 12 marks They have to evaluate how the programme went and how it could be improved for the future. They must: Compare the pre and post test results for the fitness training programme

		Demonstrate the skills linked to each component of fitness for both activities. Design tests for two main skills you have highlighted in one of your selected activities Do the skills tests and collate the results data		Describe the strengths of the programme and the areas that need improving Discuss how you adapted the plan Describe how the plan could be improved if the process was to be repeated in future.
Resources available	Resources found in Secure Staff folder, such as assignment checklist, WAGOLLS, access to previously moderated cohort work, and planned teacher resources with learning outcomes and assessment criteria.	Resources found in Secure Staff folder, such as assignment checklist, WAGOLLS, access to previously moderated cohort work, and planned teacher resources with learning outcomes and assessment criteria.	Resources found in Secure Staff folder, such as assignment checklist, WAGOLLS, access to previously moderated cohort work, and planned teacher resources with learning outcomes and assessment criteria.	Resources found in Secure Staff folder, such as assignment checklist, WAGOLLS, access to previously moderated cohort work, and planned teacher resources with learning outcomes and assessment criteria.
Notes Why this topic is important...	The first section of this unit is important as it allows students to understand the key components of fitness which are the key pillars of knowledge needed to complete all assessment tasks in R181. This content also then helps students to apply this knowledge to future units on the course by giving sporting examples which enable them to achieve higher marks in the exam (R180) and nutrition unit (R183). R181 is also taught first as it is the most practical unit out of the three within the qualification, which engages students at the start of the course.	This section of unit R181 allows students to understand how the components can be tested and gives them an opportunity to reflect on their performance against national data to understand their own fitness levels. This also allows students to understand what needs to be completed prior to designing an effective training programme, to ensure they can train effectively improving their physical health when leaving school.	This section of the unit allows students to apply their knowledge of both principles and methods of training to a specific sporting athletes training programme. As the scenario and sports change each year it encourages students to have a more detailed understanding of sports that they may not be as familiar with. This knowledge and assessment task allows students to practice and demonstrate their understanding, before they apply this knowledge when designing their own training programme.	This final section of unit R181 allows student to apply all their knowledge learnt throughout, to design an effective training programme to improve their own performance. This will then give students the skills, knowledge and confidence to be able to effectively and safely train outside of school, encouraging a healthy active lifestyle.